Patent claims

1. A method for transporting bodywork panels (12) of a vehicle by means of an endless transport device (10), equipped with a plurality of carrier units (16) that are spaced at intervals in the transport direction (14), characterized in that an associated group (18) of panels is stacked on at least one carrier unit (16), the group (18) of panels is transported as far as a panel removal station (20) and in each case an individual bodywork panel (12) is removed by a panel separation device (22).

2. The method as claimed in claim 1, characterized in that the bodywork panels (12) of a respective group (18) of panels are arranged stacked on edge in the carrier unit (16) at a panel group formation station (24).

3. The method as claimed in claim 1 or 2, characterized in that the group (18) of panels in the carrier unit (16) is built up by means of the successive deposition of individual bodywork panels (12).

4. The method as claimed in claim 3, characterized in that the individual bodywork panels (12) are deposited in the carrier unit (16) manually or in an automated manner, forming the group (18) of panels.

5. The method as claimed in one of claims 2 to 4, characterized in that the group (18) of panels is transported from the

panel group formation station (24) as far as the panel removal station (20) in a transport direction (14) that extends obliquely upward.

6. The method as claimed in one of the preceding claims, characterized in that the respective group (18) of panels is transported by means of the transport device (10) during a predefinable cycle time, the cycle time depending on the required panel separation time of a complete group (18) of panels respectively located at the panel removal station (20).

7. A transport device (10) for implementing the method as claimed in one of the preceding claims, characterized in that the respective carrier unit (16) has at least one carrier element (26) projecting substantially at right angles to the transport direction (14).

8. The transport device as claimed in claim 7, characterized in that the position of the carrier element (26) can be adjusted in the transport direction (14).

9. The transport device as claimed in claim 7 or 8, characterized in that the position of the carrier element (26) can be adjusted transversely with respect to the transport direction (14).

10. The transport device as claimed in one of claims 7 to 9, characterized in that the number and/or the design

construction of the carrier elements (26) used in a carrier unit (16) can be varied as a function of the geometric shape of a bodywork panel (12).

11. The transport device as claimed in one of claims 7 to 10, characterized in that it is constructed as a chain transport device.

12. The transport device as claimed in one of claims 7 to 11, characterized in that it is an inclined transport device, in particular with an adjustable transport direction (14).

13. The transport device as claimed in one of claims 7 to 12, characterized in that the panel separation device (22) is constructed as a panel removal pivoting gripper.